UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,026	08/29/2006	Naoki Kanie	129234	6639

25944 7590 06/22/2010

OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER	
YANCHUK, STEPHEN J	

ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
06/22/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
jarmstrong@oliff.com

Advisory Action

The amendment will be entered if applead since claim 1 now includes all the limitations of previous claimed 1 & 2. The previous rejection is however maintained. In the instant application, the operation abnormality of the purge valve is taught to be when fuel gas is larger quantity than predetermined. The interpretation of fuel gas is either amount of fuel present in the

The amendment will be entered if appealed since claim 1 now includes all the limitations of previous claimed 1 & 2.

The previous Final Rejection is maintained.

The operation abnormality of the purge valve is when fuel gas is larger quantity than predetermined. The interpretation is when the % of hydrogen in the stream is higher than a predetermined value. The prior art teaches a concentration sensor that will ensure that they expelled gas is below a predetermined value. If the purge valve allows fuel gas to pass, either planned or unplanned, the sensor will ensure that the exhaust is below a threshold. The prior art is capable of performing the same action as the claim.

"Yoshizumi does not disclose that a purge operation is performed as a result of detecting an abnormality in shut valve". This feature has not been claimed. A controller has not been claimed that activates a purge command but analyzes fuel that passes through the purge valve.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231

USPQ 375 (Fed. Cir. 1986). Adding complexity to a simple system is not grounds for stating that art is not combinable.

Manery is taught to cause a purge when a voltage sensor indicates a purge is needed. The purge is needed when performance drops below a threshold level, thus the cell is not operating optimally. Manery will be in effect if the purge valve should allow more fuel to pass through which requires the diluting means to compensate.

It is strongly suggested that the applicant claim the structure of sensors since the complexity of the system of the specification will overcome the prior art of record. Since 112 6th is invoked and the prior art performs the same action, the claims are rejected. A valve that malfunctions by not closing all the way will allow fuel of higher hydrogen % to flow through which will require more bypassed oxidant to compensate. The malfunction is detected and adjusted for by the system of the prior art.

/STEPHEN YANCHUK/

Examiner, Art Unit 1795